

**Bose® 401® Direct/Reflecting® Speakers**

Owner's Guide

***BOSE***



### **Thank you**

Congratulations on your purchase of Bose® 401® Direct/Reflecting® speakers. Their integrated system of advanced Bose technologies delivers superior sound reproduction from a floorstanding design.

### **For your records**

Serial numbers are located on the back of each 401 speaker.

Serial numbers: \_\_\_\_\_ and \_\_\_\_\_

Dealer name: \_\_\_\_\_

Dealer phone: \_\_\_\_\_ Purchase date: \_\_\_\_\_

We suggest you keep your sales slip and warranty card together with this owner's guide.

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### Before you begin

Your 401® Direct/Reflecting® speakers re-create a natural balance of reflected and direct sound energy for an open, spacious performance. They are designed at Bose® to bring you high-quality listening pleasure.

The Stereo Space® array inside each speaker creates a pattern of direct/reflected sound similar to what you experience at a live concert. These distinct left and right speakers also feature tuned port enclosures that contribute to their deep, room-filling bass. An advanced crossover design adds to the realism and clear definition of both musical instruments and voices.

Your 401 speakers are significantly different from conventional speakers, so be sure to read this owner's guide. It will help you set up and use your speakers properly, for the greatest enjoyment.

### Unpack the carton

Carefully unpack the carton and save all packing materials for possible future use. Check the carton contents (Figure 1). The carton contains two 401 speakers labeled Part 1 (left) and Part 2 (right).

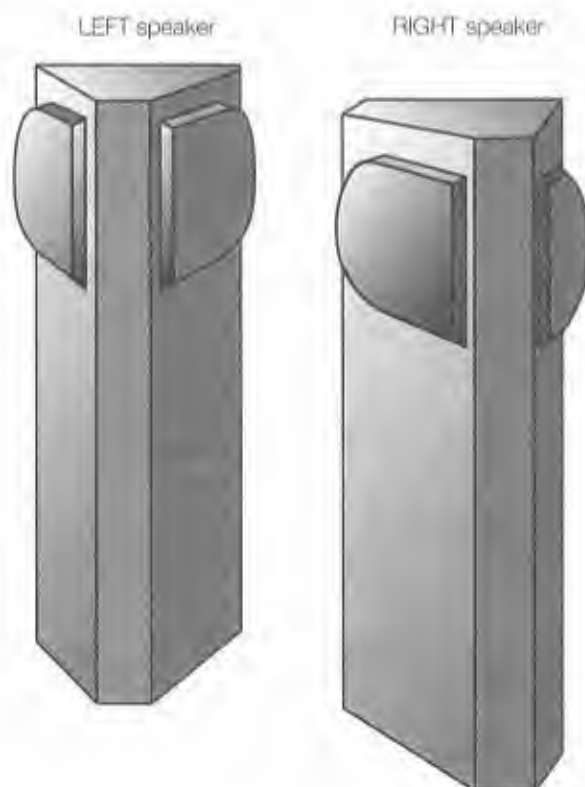
If either speaker appears damaged, do not use them. Instead, repack both speakers in the original carton and notify your authorized Bose dealer immediately.

**Note:** Now is a good time to record the speaker serial numbers on page 2 of this guide and on your warranty card.

**Warning:** Each speaker weighs approximately 30 pounds (13 kg). Use good lifting practice to avoid injury.

### WARNING:

To avoid danger of suffocation, keep the plastic bags that wrap these speakers out of the reach of children.



**Figure 1**

What comes in the carton:

- Left speaker (Part 1)
- Right speaker (Part 2)

## Select the locations for your 401<sup>®</sup> speakers

Each Bose<sup>®</sup> 401<sup>®</sup> speaker incorporates a weight in the base of the speaker for maximum stability. Placing any object on top of the speaker will make it less stable and is not recommended. Be sure to place your speakers on a flat surface.

Place the left (Part 1) and right (Part 2) speakers on the left and right sides of your room, as you face them. Exactly where you put them depends on the size and style of your room and where you think they sound best. Feel free to experiment to find a location that is both convenient and provides the sound you prefer.

Here are some basic guidelines. Place the speakers:

- approximately 5 feet (1.5 m) apart. You can achieve excellent results with a separation of as much as 15 feet (5 m).
- from 2 to 5 feet (.6 – 1.5 m) from each side wall.
- at least 24 inches (.6 m) from any TV screens or monitors.
- at least 2 inches (5 cm) from the wall behind them.

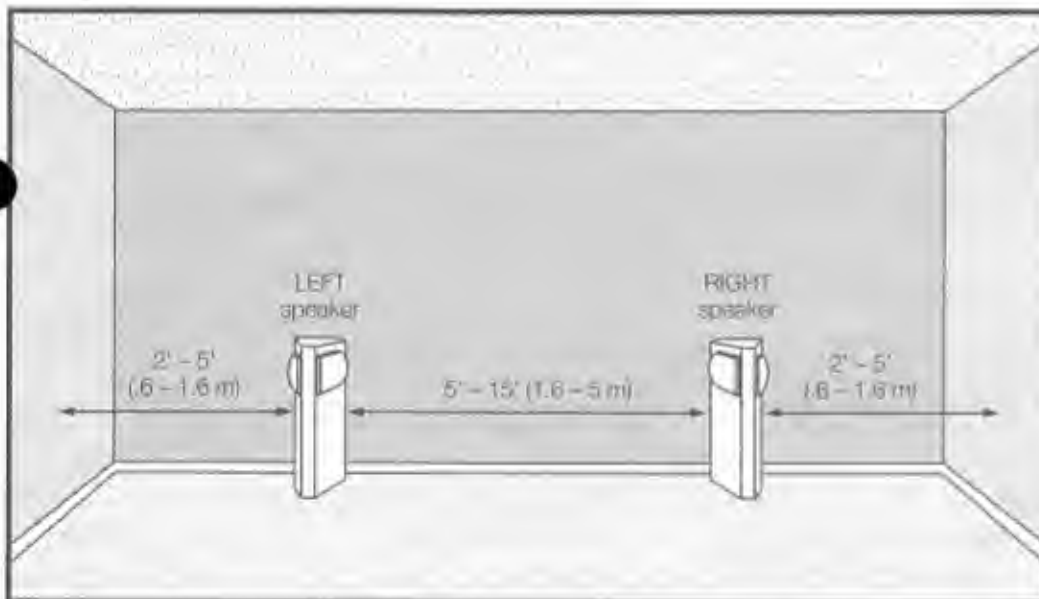
**Note:** Because the grilles on the front of each speaker protect the drivers inside, we recommend that you do not remove the grilles.

### NOTE:

For the most realistic sound image, make sure the left speaker is placed on the left and the right speaker is on the right side of your room, as you face them.

### CAUTION:

Do not use these speakers in a moving vehicle.



**Figure 2**

Placement guidelines

### Choose the cord

It is important to use the proper gauge (thickness) of speaker cord. Standard zip cord (2-conductor, 18-gauge wire) works for most applications. You can find this wire at most electrical and hardware stores.

You will need thicker wire if your speakers will be more than 30 feet (9 m) from a receiver or amplifier. Refer to the wire recommendations under "Technical information" on page 10, or contact your authorized Bose® dealer for more information.

**Note:** Before running speaker cord through a wall or under a floor, check your local building code requirements and safety regulations. You may want to contact an electrical installer for this information.

### Prepare the cord

Speaker cord consists of two insulated wires. The insulation around one wire is marked (striped, collared, or ribbed). This marked wire is always positive (+). The plain wire is always negative (-). These wires correspond to the red (+) and black (-) terminals on the speakers and the receiver.

At the ends of each cord, strip approximately 1/2 inch (12 mm) of insulation from both wires. Twist the bare end of each wire so loose strands will not touch across terminals. Be sure to connect each wire to the proper terminal (positive to positive and negative to negative).

**Note:** It is sometimes difficult to distinguish wire markings. Inspect both wires carefully.

### Make the connections

Just press the terminal tab on the back of each speaker to insert the appropriate wire (Figure 3).

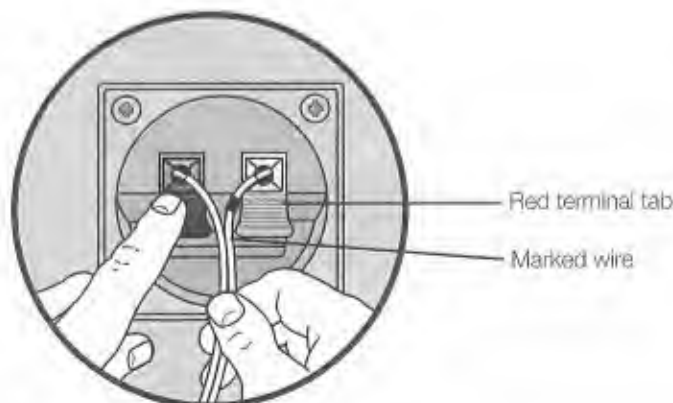
1. Connect one speaker cord to your right speaker.
  - a. Attach the marked wire at one end to the red (+) terminal.
  - b. Attach the plain wire at that end to the black (-) terminal.
2. Connect the other end of the same cord to the RIGHT SPEAKER OUTPUT of your receiver.
  - a. Attach the marked wire to the red (+) terminal.
  - b. Attach the plain wire to the black (-) terminal.
3. Connect the second cord to the left speaker and LEFT SPEAKER OUTPUT of your receiver. Follow the steps in 1 and 2 above.

#### CAUTION:

Never use broken or frayed wiring, which can result in electrical shock or damage.

#### CAUTION:

Before making any connections, turn off your receiver and unplug it from the AC power (mains) outlet. Not doing so may result in damage to your system.

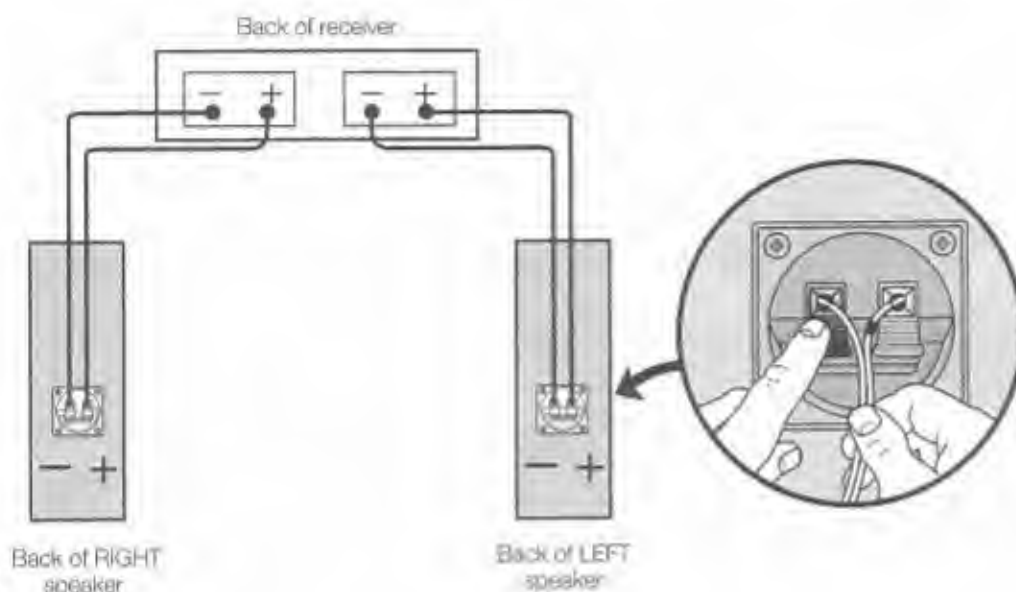


**Figure 3**

How to make terminal connections

## Check the connections

Check to be sure all connections are made positive to positive (+ to +) and negative to negative (- to -) (Figure 4). Make sure that no loose strands of wire touch across terminals. Bridged wires can short circuit and damage the amplifier. Tighten any loose connections before you plug in the receiver and turn it on.



**Figure 4**

Completed connections

## Test the speakers

To make sure your speakers operate correctly:

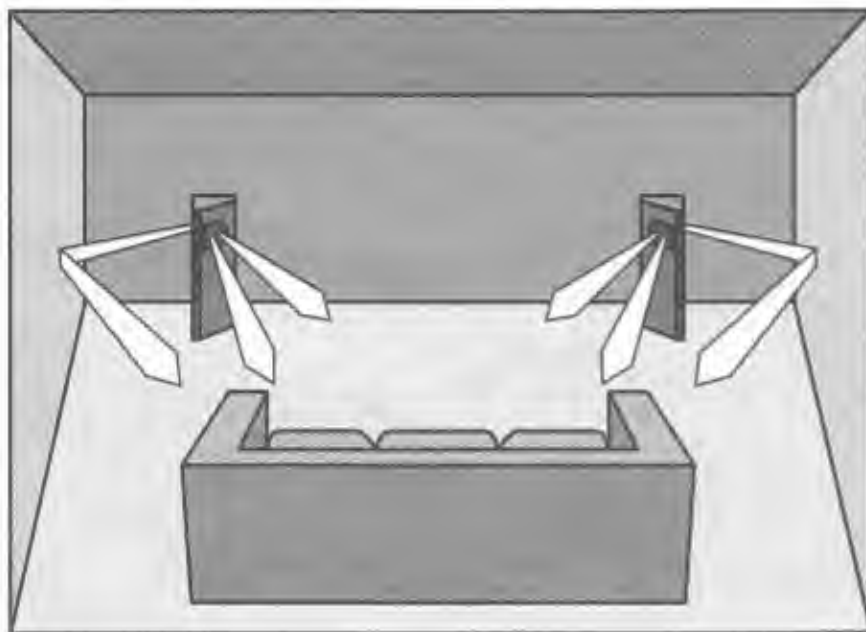
1. Place the speakers less than 6 inches (15 cm) apart, facing each other.
2. Turn on your receiver. Set the receiver to MONO (monophonic), if that is an option on your receiver.
3. Make sure that all special effects (such as surround sound) are turned off.
4. Set the balance control to normal (center position).
5. Play some deep bass passages of music through the speaker.

The sound should seem to come from a point between the two speakers. The bass should be full and natural. If it is not, one of the connections may be reversed, causing the speakers to play out of phase (refer to "Make the connections" on page 6).

To correct the problem, make sure all the wires are connected positive to positive (+ to +) and negative to negative (- to -). Then repeat steps 1 through 5 above to re-test the speakers.

## **Enjoying sound in a variety of ways**

Bose<sup>®</sup> 401<sup>®</sup> Direct/Reflecting<sup>®</sup> speakers are designed to work with a variety of stereo receivers and amplifiers. The open, spacious performance of these speakers also makes them an ideal choice for home theater, or for listening to CD's, tapes, or radio broadcasts (Figure 5).



**Figure 5**

401<sup>®</sup> Direct/Reflecting<sup>®</sup> speaker  
sound path

## **Cleaning the speakers**

Clean the surface of your speakers with a soft damp cloth. Do not use any sprays near the system or allow liquids to spill into any openings. Also, do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives.

The speaker grille panels require no special care. You may vacuum them carefully to remove dust.

## **Warranty period**

Bose 401 Direct/Reflecting<sup>®</sup> speakers are covered by a limited 5-year transferable warranty. Details of the coverage are provided on the warranty card that came with your speakers. Please fill out the information section on your card, detach, and mail to Bose.

## Troubleshooting

<b>Problem</b>	<b>What to do</b>
No sound	<ul style="list-style-type: none"> <li>• Make sure the receiver is plugged in and turned on.</li> <li>• Check to be sure the AC power (mains) outlet is working.</li> <li>• Disconnect any headphones plugged into the headphone jack.</li> <li>• Make sure the receiver is not set to MUTE.</li> <li>• Refer to the owner's guide that came with your receiver.</li> <li>• Check connections to both the speakers and the receiver. Refer to "Make the connections" on page 6. Correct any connection errors.</li> </ul>
No sound from one speaker	<ul style="list-style-type: none"> <li>• Disconnect the working speaker from the receiver.</li> <li>• Switch the cord of the "faulty" speaker from its original receiver jacks to the other set of jacks (the working speaker was originally attached to those jacks).               <ul style="list-style-type: none"> <li>– If the speaker now works, the problem is in your receiver.</li> <li>– If the speaker does not work, continue below.</li> </ul> </li> <li>• Remove the cord from the working speaker and connect it to the "faulty" speaker and either set of receiver jacks.               <ul style="list-style-type: none"> <li>– If the speaker now works, the problem was in the original speaker cord.</li> <li>– If the speaker does not work, the problem is in the speaker.</li> </ul> </li> </ul>
One speaker sounds distorted	<ul style="list-style-type: none"> <li>• Follow the same procedure for the problem of no sound from one speaker, as outlined above.</li> </ul>
Not enough bass or treble	<ul style="list-style-type: none"> <li>• Adjust the bass and treble controls on the receiver.</li> <li>• Check the connections to make sure they are correctly in phase (+ to + and – to –). Refer to "Make the connections" on page 6.</li> <li>• Move the speakers closer to or farther from the side walls or other sound-reflecting hard surfaces.</li> </ul>

## Customer service

If the troubleshooting guidelines above do not solve your problem, contact your authorized Bose<sup>®</sup> dealer to arrange for service. To obtain information or service directly from Bose, refer to the listing at the end of this guide. Bose Corporation will make every effort to correct any problem within the terms of your warranty.

## **Technical information**

### **Features**

Direct/Reflecting® speaker design  
Stereo Space® array  
Dual Frequency™ crossover network  
Automatic tweeter protection circuitry  
Syncom® computer quality control

### **Driver complement**

Two (2) 6.5 inch (16.6 cm) long excursion Digital Dynamic Range® woofers  
One (1) 2-inch (5.1 cm) high-sensitivity tweeter

### **Compatibility/Impedance**

Compatible with amplifiers and receivers rated from 10 to 200 watts per channel.  
Rated 4 to 8 ohms

### **Wire recommendations**

<i>Gauge</i>	<i>Length</i>
18 (0.75 mm <sup>2</sup> )	30 ft (9 m) maximum
16 (1.5 mm <sup>2</sup> )	45 ft (14 m) maximum
14 (2.0 mm <sup>2</sup> )	70 ft (21 m) maximum

### **Fusing**

Series-connected 2A fast-blow fuse recommended

### **Enclosure**

Vinyl veneer finish

### **Size/Weight**

Speaker: 29.6"H x 11.1"W x 11.1"D (75 x 28 x 28 cm)  
Speaker pair: 57 lb (26 kg)

**USA**

Bose Corporation, The Mountain  
Framingham, MA 01701-9168  
1-800-367-4008  
Phone hours - ET (eastern time):  
Weekdays 9 a.m. to 8 p.m.  
Saturdays 9 a.m. to 3 p.m.

**Canada**

Bose Ltd., 1-35 East Beaver Creek Road  
Richmond Hill, Ontario L4B 1B3  
1-800-444-BOSE (1-800-444-2673)  
Phone hours - ET (eastern time):  
Weekdays 9 a.m. to 5 p.m.

**European Office**

Bose B.V., Nijverheidstraat 8  
1135 GE Edam, Nederland  
TEL 0299-390190 FAX 0299-390109

**Australia**

Bose Australia, Inc., 1 Sorrell Street  
Parramatta, N.S.W. 2150  
TEL 02 204-6111 FAX 02 204-6122

**Belgique/België**

Bose N.V., Limesweg 2, B-3700 Tongeren  
TEL 012-390800 FAX 012-390840

**Danmark**

Bose A/S, Industrivej 7, 2605 Brøndby  
TEL 4343-7777 FAX 4343-7818

**Deutschland**

Bose GmbH, Max-Planck-Straße 36d  
D-61381 Friedrichsdorf  
TEL 06172-71040 FAX 06172-710419

**France**

Bose S.A., 6, rue Saint Vincent  
78100 Saint Germain en Laye  
TEL 01-30616363 FAX 01-30614105

**India**

Bose Corporation India Private Limited  
W-16, Greater Kailash-II  
New Delhi 110 048  
TEL (011) 648 4462 FAX (011) 648 4463

**Ireland**

Bose Corporation  
Carrickmacross, Co Monaghan  
TEL 042-61988 FAX 042-61998

**Italia**

Bose S.p.A., Via Luigi Capucci, 12  
00147 Roma  
TEL 06-5127641 FAX 06-5115438

**Japan**

Bose K.K., Shibuya YT Building  
28-3 Maruyama-cho  
Shibuya-ku, Tokyo 150  
TEL 3-5489-1054 FAX 3-5489-0591

**Nederland**

Bose B.V., Nijverheidstraat 8  
1135 GE Edam  
TEL 0299-390111 FAX 0299-390109

**Norge**

Bose A/S, Solheimsgate 11  
N-2001, Lillestrøm  
TEL 63-817380 FAX 63-810819

**Österreich**

Bose Ges.m.b.H., Vienna Business Park  
Wienerbergstrasse 7 (10. OG)  
A-1100 Vienna  
TEL 01-60404340 FAX 01-604043423

**Schweiz**

Bose AG, Rünenbergerstrasse 13  
4460-Gelterkinden  
TEL 061-9815544 FAX 061-9815502

**Sverige**

Bose A/S, Blåndsådgatan 2D  
S-43146 Mölndal  
TEL 31-878850 FAX 31-274891

**United Kingdom**

Bose Limited, Unit G2  
Trinity Trading Estate  
Sittingbourne, Kent ME10 2PD  
TEL 01795-475341 FAX 01795-427227

**From other locations**

Bose Customer Service, 1 New York Ave.  
Framingham, MA 01701-9168 USA  
TEL (508) 766-1900 FAX (508) 766-1919

**World Wide Web**

[www.bose.com](http://www.bose.com)

